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Ag 84 A 6
 United States
 Department of
 Agriculture

Economic
 Research
 Service

Agriculture
 Information
 Bulletin
 Number 684

October 1993

U.S. Poultry and Red Meat Consumption, Prices, Spreads, and Margins

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Total poultry and red meat per capita consumption set new records almost every year between 1960 and 1992, chiefly due to increased poultry consumption. Red meat (mainly beef and pork) consumption peaked in 1971 and has declined since except for a small increase in 1992. However, per capita consumption of poultry nearly tripled, more than offsetting the 6-percent decline in red meat consumption.

Beef consumption per capita peaked in 1976, decreased rapidly through 1980, and has slowly declined since. Per capita beef consumption is expected to equal 94 pounds in 1993, higher than pork (68 pounds) or broiler (78 pounds) consumption. Per capita pork consumption has remained relatively stable since 1980, while broiler consumption has increased steadily and now exceeds pork (fig. 1). Increased consumption of broilers has been attributed to:

(1) Lower retail prices than for beef or pork.

Lower poultry costs are partly due to rapid increases in firm size and efficiency and improved coordination among marketing levels.

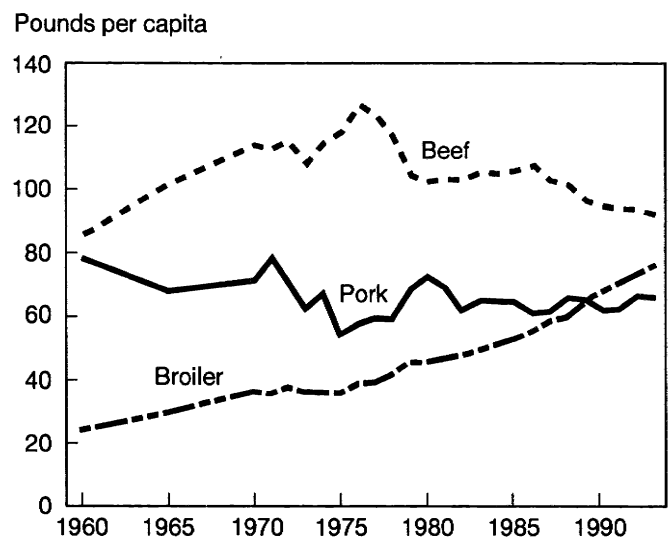
(2) Perceived health benefits. Poultry is regarded as having lower cholesterol and fat than red meat, although levels vary by method of preparation (broiling vs. frying, for example).

ERS meat consumption estimates are based on carcass or ready-to-cook (RTC) measures, the only direct measure of total meat produced in the United States. However, these estimates are also furthest removed from the meat products consumers generally buy or eat. Such estimates contain bone, fat, and other weight typically removed prior to purchase at retail.

To compensate, other consumption measures are sometimes used. Retail weight is important to those who wish to estimate consumer expenditures on or demand for meat. Boneless equivalent (BE) weight best suits consumption estimates designed to more nearly reflect actual ingestion. Conversion factors, calculated by ERS, adjust from a base value to indicate the amount of bone and fat removed at different market levels. Smaller proportions of fat and bone are now included in retail sales than was the case just a few years ago.

This report also contains (1) estimated prices that correspond with the three consumption measures, (2) definitions of price spreads and industry margins, and (3) costs between the farm and retail price of beef.

Figure 1
Beef, broiler, and pork consumption, carcass and RTC weight equivalent



Three Measures of Consumption

1. Carcass and Ready-to-Cook Weight

All ERS meat consumption estimates are based on carcass or RTC measures. The only direct measure of the total quantity of meat produced in the United States is slaughter data collected by USDA and state meat inspectors. These data are assembled and published by USDA's National Agricultural Statistics Service (NASS) on a carcass weight basis for red meats and RTC weight basis for poultry. Small differences exist in the definitions of the two (inclusion or exclusion of skin, internal organs, etc.), but they are roughly comparable measures of the total dressed weight, including bone and fat, of poultry and red meat slaughtered in the United States in a given time period.

Exports and imports must also be accounted for. Meat trade data are reported by the U.S. Department of Commerce on a product weight basis. Product weight is the logical way to collect data for the amounts of exports and imports. Since U.S. supply and utilization tables are on a carcass or RTC basis (to provide for a standardized comparison over time), the product weight is adjusted to an equivalent basis for calculations. Each product category has been examined and assigned a conversion factor that reflects carcass or RTC weight. In general, the conversion factors are larger than one as the product loses weight (fat, bone, etc.) when processed.

After traded quantities are adjusted to a carcass or RTC basis, ERS calculates total consumption (disappearance) as U.S. production plus the change in stocks plus imports minus exports. Total consumption is divided by an estimate of the total U.S. population, including armed forces overseas, to arrive at per capita consumption on a carcass or RTC basis.

Carcass and RTC weight consumption estimates (table 1, fig. 2) are the starting point for all other estimates. They are the most precise, and require the fewest assumptions. However, carcass and RTC weight estimates are also furthest removed from the meat products consumers generally buy, prepare, or eat. These weight estimates contain bone, fat, and other weight typically removed before the meat is eaten, and often removed prior to purchase at retail.

RTC Weight Broiler and Turkey Prices

Whole-bird retail prices are available from the U.S. Department of Labor's Bureau of Labor Statistics (BLS) for broilers and turkeys. While less than 20 percent of broilers are now sold whole, 30-40 percent of turkeys continue to be sold whole. RTC prices are reported for the whole bird including neck, skin, and giblets. Whole broiler and turkey (RTC) prices are comparable, but retail-level prices for beef or pork carcasses are not available because grocery stores almost never sell beef or pork in carcass form.

Until 1993, ERS calculated broiler expenditures based on RTC weight, but now uses a retail composite series. RTC turkey prices and quantities are still used to calculate turkey expenditures.

Definitions and Sources

Economists use the word "consumption" in its economic sense to signify a quantity (or value) purchased or used--and not necessarily a quantity eaten. Sometimes the term "disappearance" is used in place of consumption. Disappearance may be more appropriate since consumption estimates are all based on published measures of dressed meat from livestock or poultry slaughtered in U.S. plants or imported into the United States. No annual comprehensive direct measures of actual consumer purchases exist. The implicit assumption is that meat processed or imported must ultimately disappear or be "consumed." Meat consumption and price time series are useful in analyses of the relationships among prices, consumption, and the potential substitution of meats purchased. See References for examples of such analyses.

Table 1--Poultry and red meat per capita consumption on a RTC and carcass weight basis

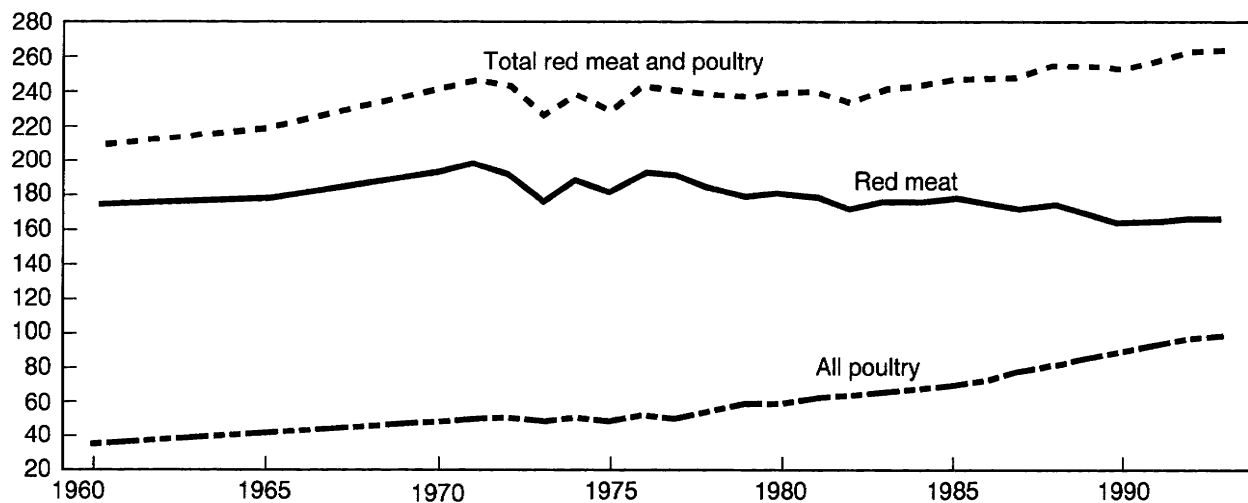
| Year | RTC | | | Carcass | | | | | Red meat and poultry | |
|-------------------|----------------|---------|---------|-------------|-------|------|------|-----------------|----------------------|--------------|
| | Other Broilers | chicken | Turkeys | All poultry | Beef | Pork | Veal | Lamb and mutton | | All red meat |
| | | | | | | | | | | |
| <i>Pounds</i> | | | | | | | | | | |
| 1960 | 23.5 | 4.4 | 6.3 | 34.2 | 85.7 | 78.3 | 6.2 | 4.7 | 174.9 | 209.1 |
| 1965 | 29.8 | 3.8 | 7.5 | 41.1 | 101.0 | 68.1 | 5.4 | 3.7 | 178.2 | 219.3 |
| 1970 | 36.9 | 3.6 | 8.1 | 48.6 | 114.4 | 72.9 | 3.0 | 3.3 | 193.6 | 242.2 |
| 1975 | 36.6 | 2.8 | 8.3 | 47.7 | 119.1 | 55.7 | 4.2 | 2.0 | 181.0 | 228.7 |
| 1980 | 47.0 | 2.2 | 10.3 | 59.5 | 103.5 | 73.9 | 1.8 | 1.5 | 180.8 | 240.3 |
| 1985 | 54.9 | 2.0 | 11.6 | 68.5 | 107.0 | 66.5 | 2.2 | 1.6 | 177.4 | 245.9 |
| 1990 | 69.2 | 1.9 | 17.6 | 88.7 | 96.1 | 64.1 | 1.3 | 1.7 | 163.2 | 251.9 |
| 1991 | 72.5 | 1.7 | 18.0 | 92.2 | 95.4 | 64.9 | 1.2 | 1.6 | 163.2 | 255.4 |
| 1992 ¹ | 76.0 | 1.6 | 18.0 | 95.6 | 95.0 | 68.4 | 1.2 | 1.6 | 166.2 | 261.9 |
| 1993 ² | 78.0 | 1.9 | 18.1 | 97.9 | 93.8 | 68.5 | 1.1 | 1.5 | 165.0 | 262.9 |

¹ Preliminary.

² Forecast.

Figure 2
Poultry RTC and red meat carcass weight consumption

Pounds per capita



Three Measures of Consumption

2. Retail Weight

For each meat (except other chicken and turkeys), ERS calculates retail weight as the carcass (or RTC) weight multiplied by a carcass-to-retail conversion factor (see box, "Consumption Conversion Factors and Data Sources," p. 10). This adjustment factor reflects all fat and bone removed from the carcass prior to purchase, and an adjustment for shrink (moisture loss). The calculations represent all meat as sold through retail grocery stores.

Conversion factors are used to obtain the retail and boneless equivalent estimates from the carcass and RTC series. The conversion factors have been adjusted over time to reflect changes due to genetics, feeding, and merchandising practices. Hogs, in particular, have become much leaner and meatier over time. Several major retailers announced in early 1986 that they were beginning to trim beef to one-quarter of an inch or less fat and other retailers followed. Closer fat trim, in particular, and the gradual move to more boneless product led to significant changes in the carcass-to-retail and carcass-to-boneless equivalent conversion factors for beef in recent years. Removal of the portion of broilers that goes to pet food was the primary factor that led to the development of a retail weight series for chicken, released in 1992. The conversion factors are re-evaluated periodically.

Retail weight is important to economists and others who wish to estimate consumer expenditures on or demand for meat. Retail weight equivalent is the level at which published retail prices and estimated quantities can be used in combination. The retail estimate (table 2, fig. 3) is designed to reflect the form in which consumers typically purchase each species of meat. Current carcass (or RTC)-to-retail conversion factors are: beef, 0.700; pork, 0.776; veal, 0.830; lamb and mutton, 0.890; and broilers, 0.877.

Retail Composite Beef, Pork, and Broiler Prices

Retail prices are matched with the ERS retail weight consumption (disappearance) series estimates for use in economic analyses. To estimate demand relationships or expenditures, the quantity and price series must correspond. BLS collects prices for retail meat cuts,

which they use in calculating the Consumer Price Index. ERS calculates a weighted average of certain published cut prices within a species/type to arrive at composite equivalent average retail prices weighted by the proportion of different cuts occurring in the live animal. Prices are estimates of U.S. average prices and may not reflect the exact price at any specific location.

Retail composite prices for beef, pork, and broilers (table 3, fig. 4) are designed to reflect the value of the carcass as purchased from retail stores with additional processing, packaging, and merchandising costs included. Broiler composite retail prices are a weighted average of bone-in leg, bone-in breast, and whole-bird prices. The percentage of bone included in the retail composite price for broilers is larger than for beef or pork. Thus, the retail weight equivalent prices do not reflect comparable quantities of muscle (meat). No turkey part prices are reported by BLS, so ERS does not calculate a separate retail composite price estimate for turkey.

Beginning in 1980, the retail and boneless weight for chicken is reduced by a physical conversion factor and an estimate of the RTC production that is used in commercial pet foods. Use of products from the carcass of red meats in pet food is so small that no adjustment is made.

Figure 3
Beef, pork, and broiler consumption, retail weight equivalent

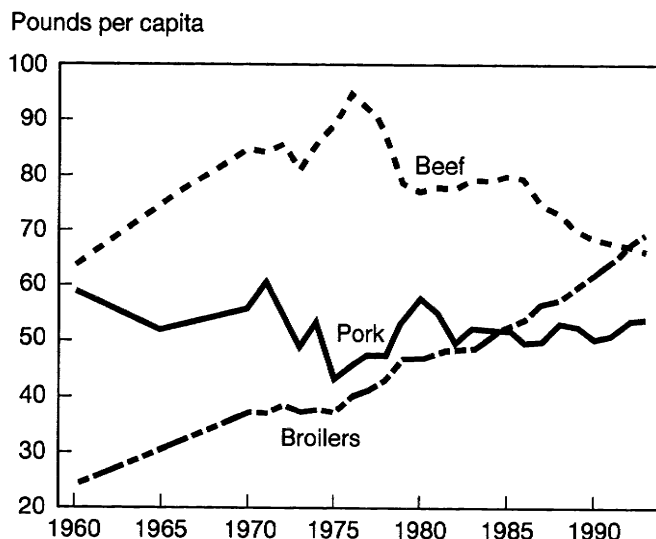


Table 2--Poultry and red meat per capita consumption on a retail weight basis

| Year | Broilers | Beef | Pork | Veal | Lamb and mutton | All red meat | Poultry ¹ |
|-------------------|----------|------|------|------|-----------------|--------------|----------------------|
| <i>Pounds</i> | | | | | | | |
| 1960 | 23.5 | 63.4 | 59.1 | 5.0 | 4.2 | 131.7 | 34.2 |
| 1965 | 29.8 | 74.7 | 51.8 | 4.4 | 3.3 | 134.3 | 40.9 |
| 1970 | 36.9 | 84.6 | 55.8 | 2.5 | 2.9 | 145.8 | 48.7 |
| 1975 | 36.6 | 88.2 | 42.9 | 3.4 | 1.8 | 136.3 | 47.7 |
| 1980 | 46.5 | 76.6 | 57.3 | 1.5 | 1.4 | 136.8 | 58.9 |
| 1985 | 52.1 | 79.2 | 51.9 | 1.9 | 1.4 | 134.4 | 65.7 |
| 1990 | 60.9 | 67.7 | 49.7 | 1.1 | 1.5 | 120.0 | 80.4 |
| 1991 | 63.6 | 66.8 | 50.4 | 1.0 | 1.4 | 119.6 | 83.4 |
| 1992 ² | 66.7 | 66.5 | 53.1 | 1.0 | 1.4 | 122.0 | 86.4 |
| 1993 ³ | 68.4 | 65.7 | 53.2 | 0.9 | 1.3 | 121.1 | 88.5 |

¹ This combines retail weight equivalent broilers with RTC-weight other chicken and turkeys.

² Preliminary.

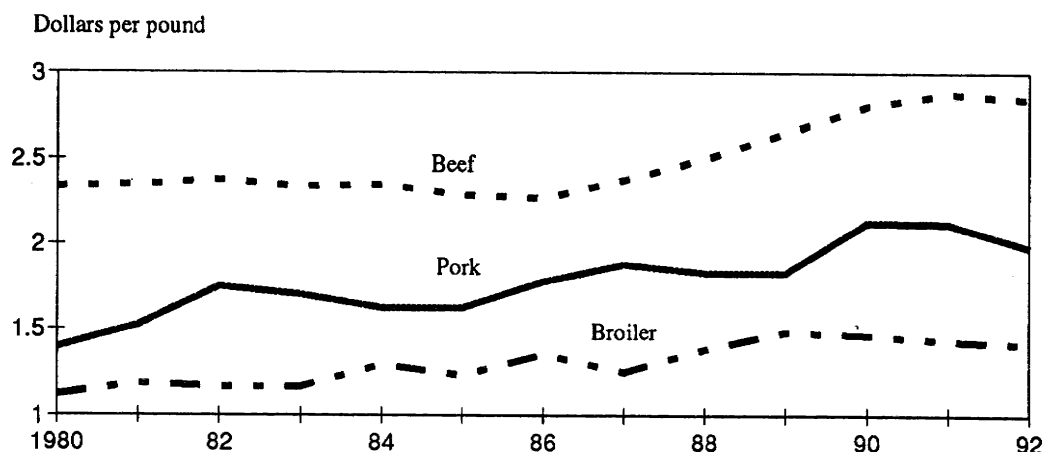
³ Forecast.

Table 3--Broiler, beef, and pork retail prices and ratios

| Year | Retail prices ¹ | | | Ratio | |
|----------------------------------|----------------------------|---------------|---------------|--------------|--------------|
| | Broilers (RTC) | Beef (retail) | Pork (retail) | Broiler/beef | Broiler/pork |
| <i>-----Cents per pound-----</i> | | | | | |
| 1950 | 60 | 75 | 53 | 0.80 | 1.13 |
| 1960 | 42 | 81 | 55 | .52 | .76 |
| 1975 | 64 | 152 | 135 | .42 | .47 |
| 1990 | 90 | 281 | 213 | .32 | .42 |

¹ Comparison of retail prices for RTC-weight broilers with retail-weight beef and pork prices does not accurately measure differences in individual years, but indicates relative trends over time. Retail weight broiler price was not used since the series began in 1980.

Figure 4
Retail weight beef, pork, and broiler price comparisons



Three Measures of Consumption

3. Boneless Equivalent Weight

Many people are interested in consumption estimates that more nearly reflect actual ingestion. Boneless equivalent (BE) weight (table 4, fig. 5) is an estimate of the uncooked weight of various meats that would have been available for human ingestion if all meat, domestic and imported, were processed and merchandised in the assumed manner. BE weight does not account for all processing shrink or additions, cooking losses or gains, plate waste, home pet use, and other factors that may affect the actual amount ingested. ERS uses carcass (or RTC)-to-boneless conversion factors to reduce carcass (or RTC) weight to boneless weight. Current BE conversion factors are: beef, 0.663; veal, 0.685; pork, 0.729; lamb and mutton, 0.658; broilers and other chicken, 0.597; and turkey, 0.790.

Boneless Trimmed Equivalent Beef, Pork, Broiler, and Turkey Values

BE prices (values) are designed to represent the value of net raw meat purchased. These values reflect only physical changes in the product and may not include labor or other expenses. For example, the price of whole

turkeys as multiplied by the BE conversion factor does not allow for an increase in price to cover the cost of cutting and deboning. Insufficient boneless prices are available from BLS to estimate the value directly, but ERS uses conversion factors here to adjust composite retail prices to a boneless trimmed value. BE values are not routinely calculated and published.

Since the Choice beef retail price is boneless except for short and back ribs, the boneless value conversion factor is 0.996. The pork boneless value factor is 0.865, broilers 0.738, and turkeys 0.790.

Fat trim, amount of skin, cooking loss, and other characteristics differ among species. The composite broiler retail-to-BE price difference is relatively large (table 5, fig. 6) because more bone (on a percentage basis) is normally purchased in retail poultry than in beef or pork. ERS may also underestimate broiler BE prices since only bone-in prices are available from BLS and the cost of labor to make boneless or value-added products is not included.

Table 4--Poultry, red meat, and fish per capita consumption on a boneless equivalent basis

| Year | Broilers | Other chicken | Turkey | All poultry | Beef | Pork | Veal | Lamb and mutton | All red meat | Fish and shell fish | Total poultry, red meat, and fish |
|-------------------|----------|---------------|--------|-------------|------|------|------|-----------------|--------------|---------------------|-----------------------------------|
| <i>Pounds</i> | | | | | | | | | | | |
| 1960 | 16.2 | 3.0 | 4.9 | 24.1 | 59.8 | 48.9 | 4.2 | 3.1 | 116.0 | 10.3 | 150.4 |
| 1965 | 20.4 | 2.6 | 5.9 | 28.9 | 70.6 | 43.8 | 3.7 | 2.4 | 120.4 | 10.8 | 160.1 |
| 1970 | 25.2 | 2.5 | 6.4 | 34.1 | 79.8 | 48.5 | 2.0 | 2.2 | 132.5 | 11.7 | 178.3 |
| 1975 | 24.9 | 1.9 | 6.5 | 33.3 | 83.2 | 38.4 | 2.8 | 1.3 | 125.8 | 12.1 | 171.2 |
| 1980 | 31.5 | 1.5 | 8.1 | 41.1 | 72.2 | 52.6 | 1.3 | 1.0 | 127.1 | 12.4 | 180.6 |
| 1985 | 35.2 | 1.3 | 9.2 | 45.7 | 74.7 | 48.1 | 1.5 | 1.1 | 125.4 | 15.0 | 186.1 |
| 1990 | 41.4 | 1.1 | 13.9 | 56.4 | 64.1 | 46.7 | .9 | 1.1 | 112.8 | 15.0 | 184.2 |
| 1991 | 43.3 | 1.0 | 14.2 | 58.5 | 63.3 | 47.3 | .8 | 1.1 | 112.5 | 14.8 | 185.8 |
| 1992 ¹ | 45.4 | 1.0 | 14.2 | 60.6 | 63.0 | 49.9 | .8 | 1.1 | 114.8 | NA | NA |
| 1993 ² | 46.6 | 1.1 | 14.3 | 62.0 | 62.2 | 49.9 | .8 | 1.0 | 114.0 | NA | NA |

NA = Not available.

¹ Preliminary.

² Forecast.

Table 5--Prices or values for different consumption weight equivalents for beef, pork, broilers, and turkey¹

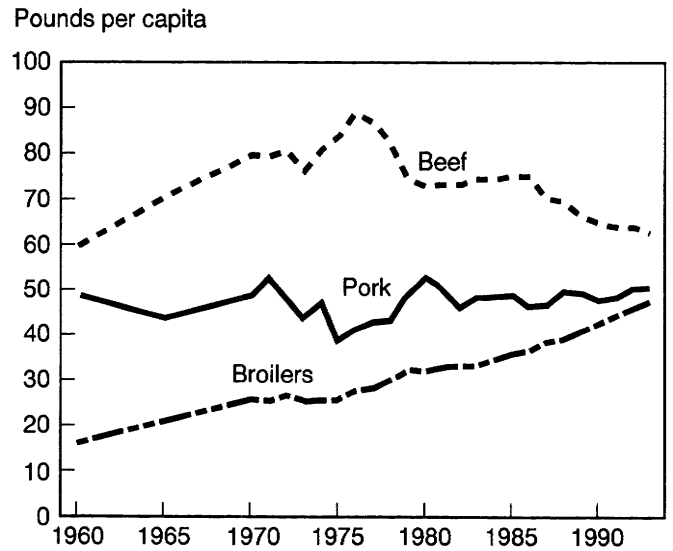
| Year | Choice beef | Pork | Broilers | Turkey |
|-----------------|---|------|-------------------|--------|
| <i>\$/pound</i> | | | | |
| | <u>Carcass weight</u> | | <u>RTC weight</u> | |
| 1970 | NA | NA | 0.42 | 0.56 |
| 1975 | NA | NA | .64 | .73 |
| 1980 | NA | NA | .72 | .94 |
| 1985 | NA | NA | .76 | 1.05 |
| 1990 | NA | NA | .90 | .99 |
| 1992 | NA | NA | .87 | .97 |
| | <u>Retail weight</u> | | | |
| 1970 | 1.00 | .77 | NA | NA |
| 1975 | 1.52 | 1.35 | NA | NA |
| 1980 | 2.34 | 1.39 | 1.12 | NA |
| 1985 | 2.29 | 1.62 | 1.23 | NA |
| 1990 | 2.81 | 2.13 | 1.46 | NA |
| 1992 | 2.85 | 1.98 | 1.41 | NA |
| | <u>Boneless equivalent weight²</u> | | | |
| 1970 | 1.01 | .89 | NA | .71 |
| 1975 | 1.53 | 1.56 | NA | .92 |
| 1980 | 2.35 | 1.61 | 1.52 | 1.19 |
| 1985 | 2.30 | 1.87 | 1.68 | 1.27 |
| 1990 | 2.82 | 2.46 | 1.98 | 1.25 |
| 1992 | 2.86 | 2.29 | 1.91 | 1.23 |

NA = Values are not available due to no consistent source of price information or so few sales are made on this basis that prices are not estimated.

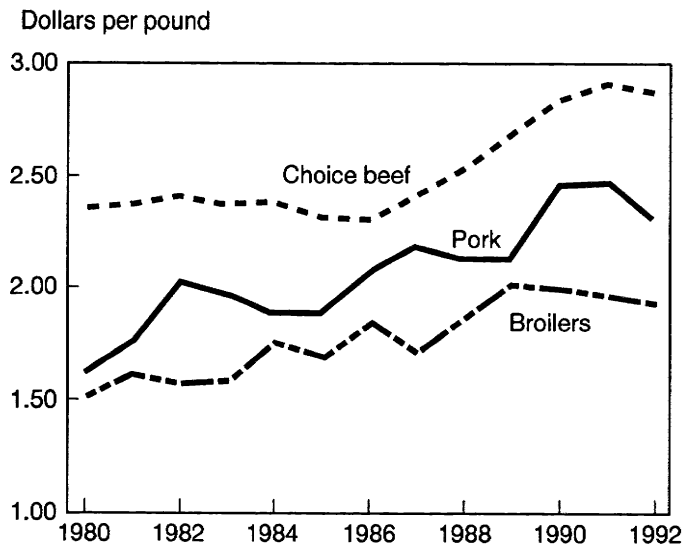
¹ Historical values used reflect fixed weights for each series. Variable weight series are available for beef and broilers. The broiler retail price more commonly published is the variable weight series.

² Turkey boneless equivalent prices differ from other boneless equivalent prices as they reflect RTC less the bones, instead of retail weight minus bones.

**Figure 5
Beef, pork, and broiler consumption, boneless equivalent weight**



**Figure 6
Boneless equivalent weight Choice beef, pork, and broiler value comparisons**



Beef Industry Price Spreads and Margins

Farm-to-retail price spreads for beef, pork, and other food products have widened over the years. But, while meat price spreads widened, retailers and meatpackers claimed their gross margins either shrank or did not increase as much as price spreads. A contradiction? Not necessarily. Though some people use the terms interchangeably, price spreads, gross margins, and net profit margins measure different components of the spread between what farmers receive and consumers pay.

USDA estimates the farm-retail price spreads and related marketing costs for foods originating on U.S. farms.

Price spreads measure differences between price levels for an equivalent quantity of product at subsequent marketing stages (see box, "The Missing \$4.25"). They also highlight the distribution of the food dollar and the responsiveness of retail prices to changes in farm supply and farm prices to changes in consumer demand.

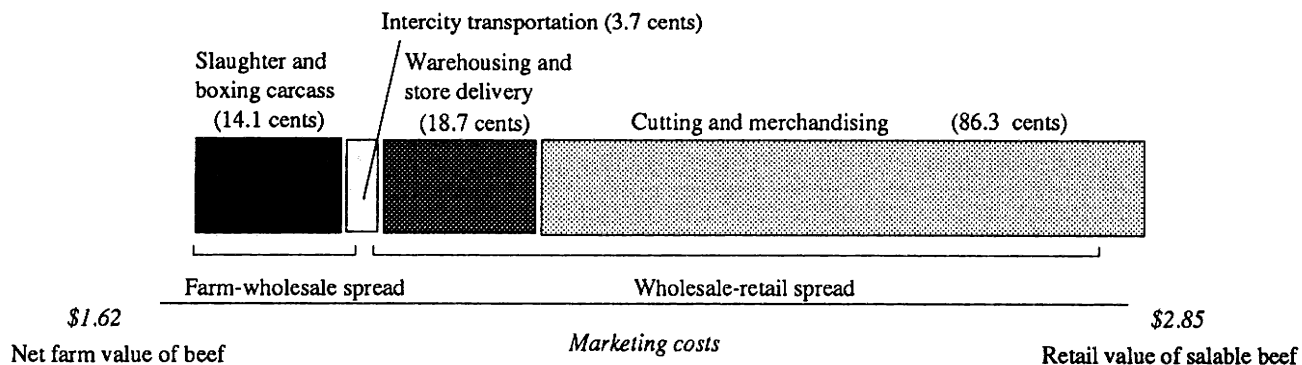
Price spreads for beef are normally greater than gross margins. Likewise, gross margins are greater than net profit margins. For example, the farm-retail price spread for Choice beef (\$1.23 in 1992) is the difference between the U.S. weighted average retail price per pound (\$2.85) and the farm value of live animal equivalent to 1 pound of retail cuts (\$1.81) less the estimated value of byproducts (\$0.19). Thus, the farm-retail spread includes all costs and profits of the agencies marketing Choice beef (fig. 7).

The farm-wholesale spread includes charges for slaughtering and boxing Choice steers and transporting the boxed beef to markets where consumed. The wholesale-retail spread includes not only the gross margin for retailing but also the charges for other intermediate marketing services, such as warehousing, local delivery to retail stores, cutting wholesale cuts into smaller portions, packaging, and merchandising.

Price spreads for Choice beef refer to value differences between selected points in the marketing chain for products from a specific type of animal, cut into an assumed set of meat cuts. Margins, on the other hand, usually reflect the difference between prices paid and received for all types and grades of animals and products handled by the firm or group of firms. Spreads are calculated at one point in time even though time elapses between purchases and sales, which could result in additional differences between spreads and margins for short time periods.

Gross margins (the difference between dollars paid and dollars received) of packers and retailers do not account for all marketing functions. Rather, they represent the tab for a packer's or retailer's labor cost, packaging, overhead, other costs, and any net profit. Gross margins exclude some costs included in the USDA spread, like charges for transportation and services performed by businesses prior to or between packing and retail. Such costs are included in what packers or retailers pay for beef, so gross margins of these firms are smaller than the overall USDA spreads.

Figure 7
Components of farm-retail price spread for Choice beef, 1992 (price per pound)



Normal **profit margins**, before and after taxes, are a relatively small component of the gross margin and total operating cost for a firm. Profit margins are usually expressed as a percentage of total sales or of stockholders' equity for a firm, rather than for an individual product.

Price spreads for beef differ from industry gross margins in other ways: (1) Price spreads reported by USDA are estimated U.S. averages for Choice beef, whereas gross margins cited by industry usually apply to the operations of single firms or a specialized group of firms; (2) Price spreads are differences between prices at different marketing levels, whereas gross margins are for specific

activities of a firm at a particular level and include only differences between dollars paid and received for beef; (3) Spread estimates assume Choice beef sold in carcass proportion while margins represent all beef handled by a firm, regardless of grade and form in which produced or sold--carcass, primal, subprimal, or cut; and (4) Spreads are based on standard yields for Choice beef, while margins may represent cutting yields for a mix of other grades as well as Choice.

Changes continually occur in the beef industry. Changes were last made in the Choice beef price spread series in 1990. Historical data were adjusted to be consistent with current calculation procedures.

The Missing \$4.25

Though a T-bone steak may cost \$5.00 per pound at the supermarket, the farmer probably received only 75 cents per pound for the steer from which the steak came. Why does the seemingly large gap of \$4.25 exist?

Many costs and product weight losses occur in transforming the steer into packaged steaks and other cuts. An average steer (**1,150 pounds**), sold at *75 cents per pound* (1992), provides a farmer with \$862.50 for the animal. The steer is sent to a meatpacker where it is dressed out to a **724-pound** carcass, now worth about \$1.19 per pound. A carcass must be cut and packaged for the retail meat case. Removing bone and fat along with some moisture and meat loss leaves about **478.4 pounds** of salable meat, worth about \$1.62 per pound, not including the value of the hide and other byproducts, worth about 19 cents per pound. The price increase reflects the removal of carcass weight not to be sold as retail beef.

Price-per-pound increases so far reflect only the loss of inedible weight. Implicit labor costs include about 14 cents for slaughter and boxing, 4 cents for transportation, and 19 cents for warehousing and store delivery. Other costs (86 cents) include packaging materials, advertising, refrigeration, firm overhead, and cutting and merchandising costs. Profit, if any, for each of the firms engaged in converting the steer into retail beef cuts increases the value to about \$2.85 per pound of salable meat. But the T-bone was sold for \$5.00 per pound. Why the difference?

Only about **18.4** pounds of the 478.4 pounds of salable meat is T-bone steak. The other 460 pounds are mostly cuts that sell for lower prices: chuck steaks and roasts, ground beef, shanks, short ribs, and stew meat. Calculating a weighted average of the T-bone steak at *\$5.00 per pound*, ground beef at \$1.55, and the other cuts at their average prices leads to an average value of \$2.85 per pound.

Consumption Conversion Factors and Data Sources

The retail and boneless equivalent consumption series are based on the carcass or RTC series. Estimates of trimming, deboning, and other merchandising practices vary between meats and over time. Sources listed below discuss the assumptions and procedures used to obtain conversion factors for each meat over time. All conversion factors are estimated as the portion of 1 pound of carcass or RTC meat that remains at the retail or boneless equivalent level.

Carcass (RTC)-to-retail (or BE) conversion factors for red meat and poultry¹

| Year | Beef | | Pork | | Veal | | Lamb and mutton | | Broilers | | Other chicken | | Turkeys | |
|------|--------|-------|--------|-------|--------|-------|-----------------|-------|----------|-------|---------------|-----------------|---------|-----------------|
| | Retail | BE | Retail | BE | Retail | BE | Retail | BE | Retail | BE | Retail | BE ² | Retail | BE ³ |
| 1965 | 0.740 | 0.689 | 0.760 | 0.643 | 0.830 | 0.685 | 0.890 | 0.658 | 1.000 | 0.690 | - | 0.690 | - | 0.79 |
| 1970 | .740 | .698 | .765 | .665 | .830 | .685 | .890 | .658 | 1.000 | .683 | - | .683 | - | .79 |
| 1975 | .740 | .698 | .770 | .690 | .830 | .685 | .890 | .658 | 1.000 | .680 | - | .680 | - | .79 |
| 1980 | .740 | .698 | .775 | .690 | .830 | .685 | .890 | .658 | .991 | .671 | - | .671 | - | .79 |
| 1985 | .740 | .698 | .780 | .723 | .830 | .685 | .890 | .658 | .948 | .641 | - | .641 | - | .79 |
| 1986 | .730 | .690 | .779 | .725 | .830 | .685 | .890 | .658 | .940 | .636 | - | .636 | - | .79 |
| 1987 | .710 | .670 | .778 | .727 | .830 | .685 | .890 | .658 | .933 | .631 | - | .631 | - | .79 |
| 1988 | .705 | .667 | .777 | .728 | .830 | .685 | .890 | .658 | .908 | .616 | - | .616 | - | .79 |
| 1989 | .705 | .667 | .776 | .729 | .830 | .685 | .890 | .658 | .884 | .600 | - | .600 | - | .79 |
| 1990 | .705 | .667 | .776 | .729 | .830 | .685 | .890 | .658 | .880 | .598 | - | .598 | - | .79 |
| 1991 | .700 | .663 | .776 | .729 | .830 | .685 | .890 | .658 | .877 | .597 | - | .597 | - | .79 |
| 1992 | .700 | .663 | .776 | .729 | .830 | .685 | .890 | .658 | .877 | .597 | - | .597 | - | .79 |
| 1993 | .700 | .663 | .776 | .729 | .830 | .685 | .890 | .658 | .877 | .597 | - | .597 | - | .79 |

¹ A complete breakdown of years is not provided before 1985. See the references for more detail. Conversion factors are listed as the portion of 1 pound of Carcass or RTC product. Conversion factors are re-examined periodically and recent years may be revised. Conversion factors used for price spreads are similar but differ due to product differences.

² Other chicken boneless equivalent is assumed the same as broilers.

³ No corrections for pet food and rendering have been included for turkey as data are unavailable.

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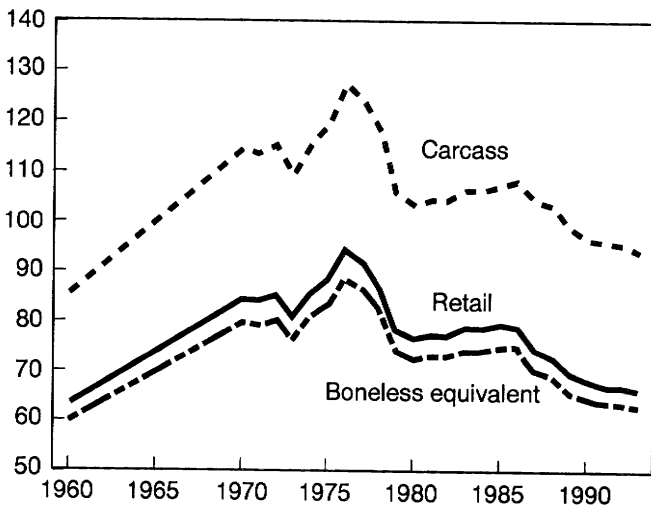
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Appendix

For easy comparison, the following figures provide all three consumption weight series for beef, pork, and broilers

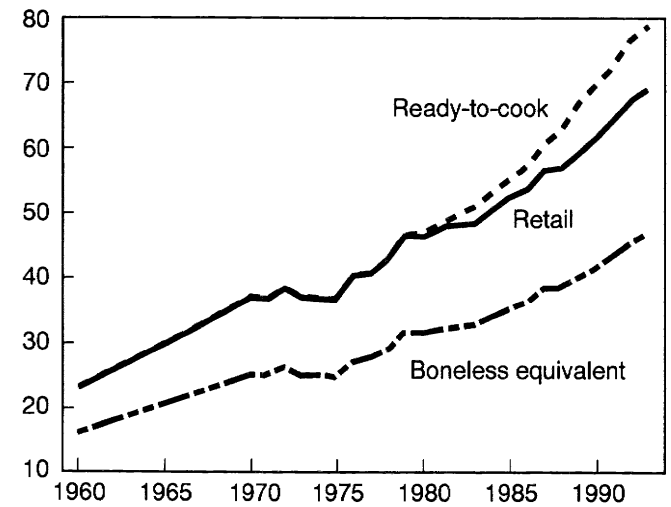
Beef consumption

Pounds per capita



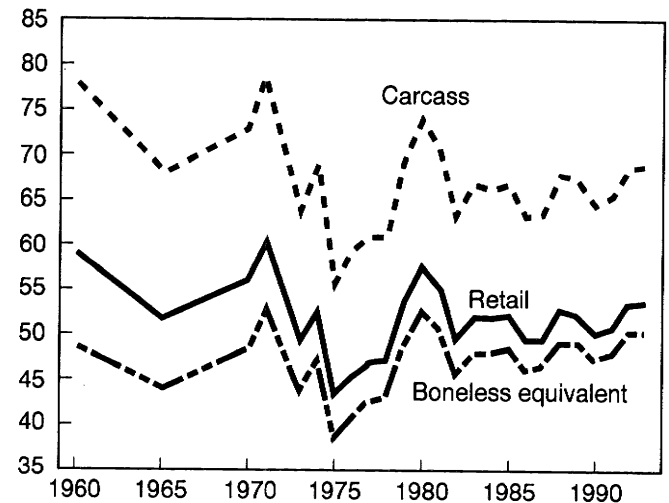
Broiler consumption

Pounds per capita



Pork consumption

Pounds per capita



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